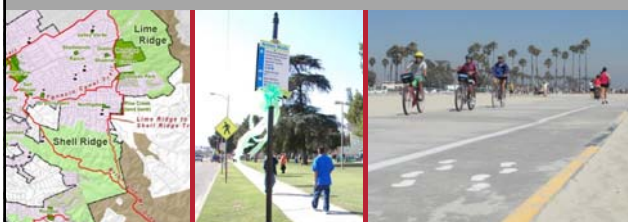


Complete Trail Wayfinding Systems Mapping, Signing and Marking

2011 California Trails and Greenway Conference



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What makes trail users happy?



- **Good trails!**
- **Good information!**



WRONG!



RIGHT!

What makes a complete wayfinding system?



- **Trail system data:** classify and characterize trails and related features
- **Signs and markings:** clear, complete, consistent
- **Public information:** text, maps, images; printed, on site and on web



Benefits of a Great Wayfinding System



Awareness, Usefulness:

- Increased public awareness of the trails/system
- Branding and public relations for the agency and sponsors/partners
- Legibility – public can research, plan and complete their trip



Benefits of a Great Wayfinding System



Increased use:

- Increased bicycle and walking trips = reduced congestion and greenhouse gases
- Integration with regional bike and walk ways, transit
- Health and recreational benefits



Benefits of a Great Wayfinding System



A better trail experience:

- Better safety, security and convenience
- A more interesting and fun – can concentrate on scenery



Benefits of a Great Wayfinding System



Better/Easier Management:

- Fewer incidents, conflicts and impacts
- Better agency and inter-agency planning, coordination
- Improved emergency and maintenance access and coordination



Steps to a Successful Wayfinding Program



1. Work with expert(s):

- Agency and public engagement
- ADA and traffic control standards
- GIS data organization and mapping
- Sign and marking graphic design and construction
- Trail planning, design and management

Benefit from others' experience!



Steps to a Successful Wayfinding Program



2. Identify responsible parties/key stakeholders:

- Trail manager(s)
- Other agencies/departments with jurisdiction
- Public safety and emergency response
- Others who may use the route – flood control, utility, agricultural



Steps to a Successful Wayfinding Program



3. Establish agency/organization communication and coordination

- Agree on basic objectives and scope
- Discuss current practices and systems
- Agree on basic wayfinding elements and concepts
- Agree on process



Steps to a Successful Wayfinding Program



4. Solicit public and stakeholder input

- Trail use patterns and desires
- Destinations and connections – existing and future
- Comments on basic elements and concepts
- Ideas for improvement



Steps to a Successful Wayfinding Program



5. Gather and analyze base data – use GIS to:

- Inventory existing wayfinding elements
- Physical and use setting– trail types, allowed uses, support features, connecting trails
- Context: bike routes, transit, key destinations, jurisdictions



Steps to a Successful Wayfinding Program



6. Coordinate or integrate traffic safety features and standards

- Road or rail crossings
- Crosswalks
- traffic calming
- Safety warnings, barriers, gates, signals
- CA MUTCD compliance highly desirable



American River Parkway Assessment

Steps to a Successful Wayfinding Program



7. Coordinate or integrate with signs for protection of resources, facilities, property



Steps to a Successful Wayfinding Program



8. Coordinate or integrate with info on use designations, regulations and courtesy



Steps to a Successful Wayfinding Program



9. Coordinate or integrate with interpretive and art elements



Trails at the North Carolina Museum of Art



River Interpretive Media along the East Bank Esplanade in Portland, OR

Steps to a Successful Wayfinding Program



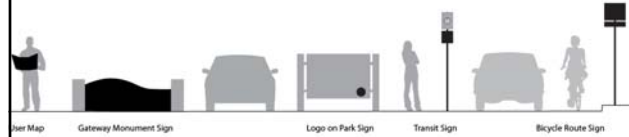
10. Study, test and adapt the system to make sure it works



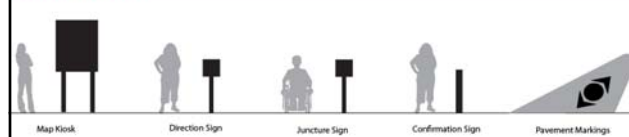
Elements of Mapping and Wayfinding



OFF SITE ELEMENTS



ON TRAIL ELEMENTS



Trail System Maps and Data

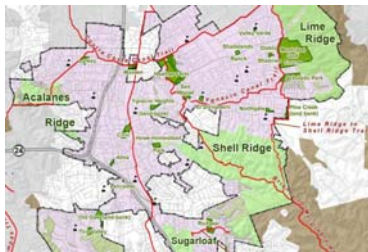


Maps Are the Basis of a Wayfinding Plan

- GIS to inventory, organize, plan, and design the trail system; wayfinding and other elements

Recycle Your Data!

- Static/Paper Maps
- Web Based Maps
- "Your are here" Kiosk Map



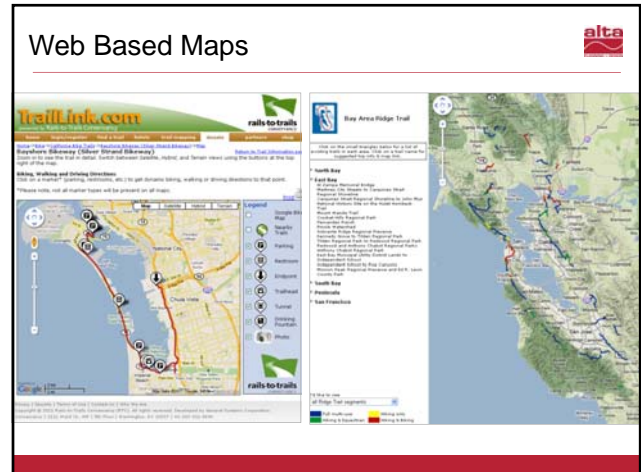
Trail System Maps and Data



What should be on a User Map?

- Trail type (paved, unpaved, class)
- Designated/allowed uses
- Accessibility information
- Destinations, services and amenities
- Jurisdictions, Park areas, Logos
- How to access – Transit stops, Bicycle Routes, Parking
- Scale, distance information, mileposts





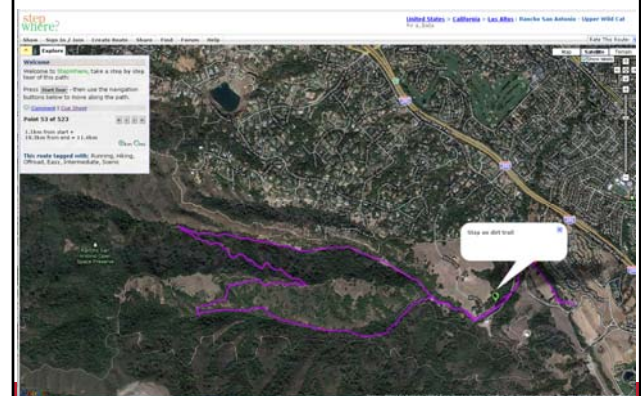
Interactive Route Mapping

- Trip and route planning
- Web-based tours
- Record collective knowledge
 - Bikely.com
 - StepWhere.com
 - Panoramio.com

City of San Jose
Google Earth Trail Tour



Interactive Route Mapping



Mapboards and Kiosks

- Orientation - "you are here"
- Map kiosks – static and interactive
- Inlaid maps or art features



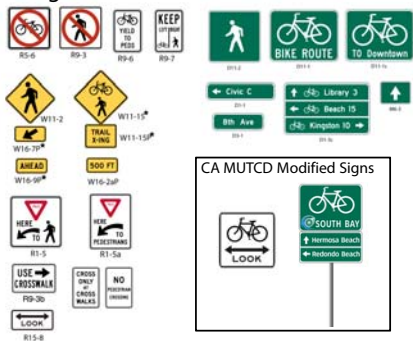
Sign and Marking Design

- Design Protocol- size, shape, material and mounting
- Graphics – elements, symbols, logos (trail, agency and/or funder), colors, themes
- Text – font, size, colors



Sign and Marking Design

CA MUTCD Signs



CA MUTCD Modified Signs



Sign and Marking Design



Milepost/Confirmation Signs



Mile Markers



Willamette River Trail, OR



Hudson River Greenway, NY



Salem Lake Trail, MN



OCSE State Trail, OR



Tobacco Heritage Trail, VA

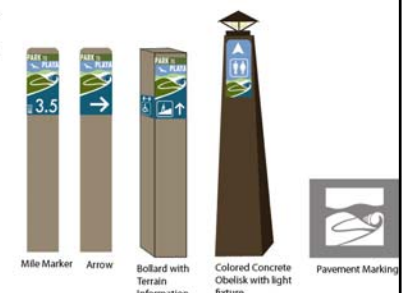
Signing System



Direction Sign



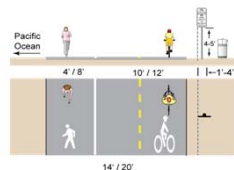
Confirmation Signs



Pavement Markings



- Trail use, direction, mile marker, boundary info



Pavement Markings



- On street markings for bicyclists (bike lane stencils and bike boulevard markings)
- Sidewalk markings for pedestrians (painted, inlaid, sandblasted)
- Pathway markings for a variety of trail user types



Pavement Markings



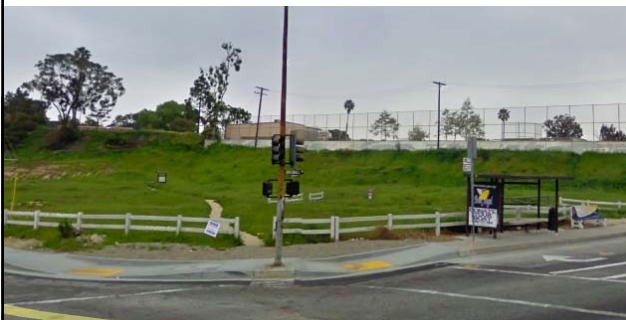
Visual Cues



- Tactile and Auditory Cues
 - Tactile warning strips
 - Material changes
- Art Elements
- Interpretive Elements



Gateway Elements



Gateway Elements



Recap – Key Steps



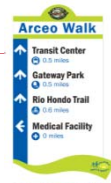
1. Expert advice/assistance
2. Involve key agency partners and stakeholders
3. Initiate a coordinated process
4. Involve public and stakeholder groups
5. Prepare a GIS database and plan – trail system and wayfinding elements



Recap – Key Steps



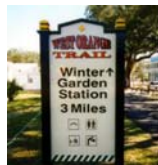
6. Coordinate/integrate:
 - Traffic control and safety
 - Resource and property protection
 - Trail use regs and courtesies
 - Interpretive and art
7. Test and adapt in field



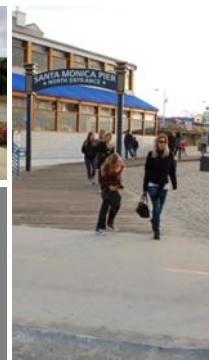
Recap – Key Wayfinding Elements



1. Static/printed user maps
2. Web maps and info
3. Site maps
4. Directional and informational signs
5. Route and info pavement markings
6. Visual cues



Questions?



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